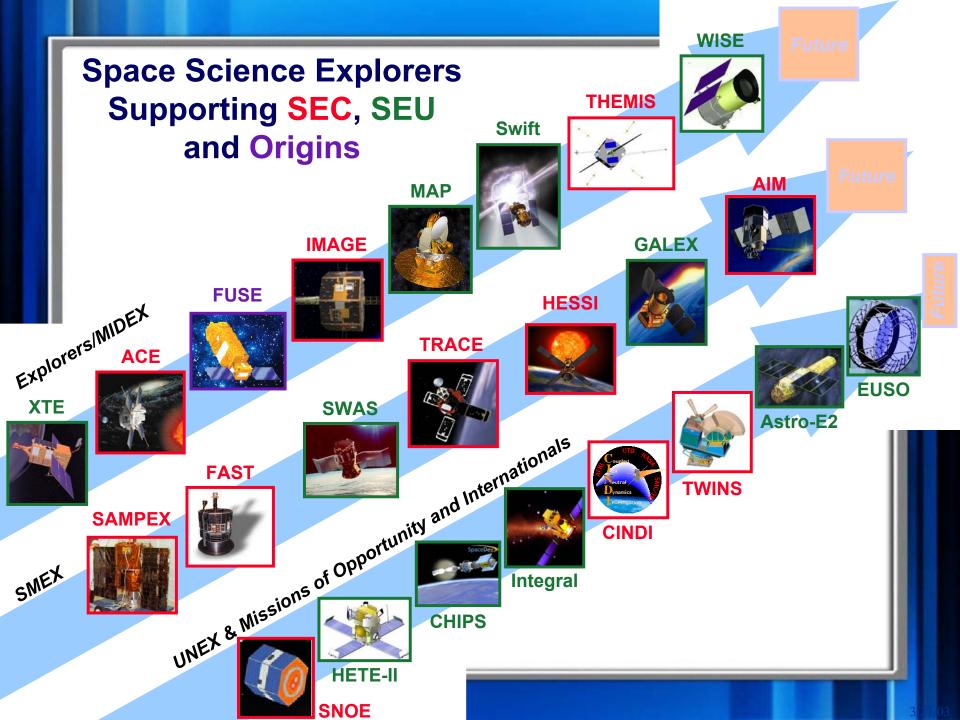
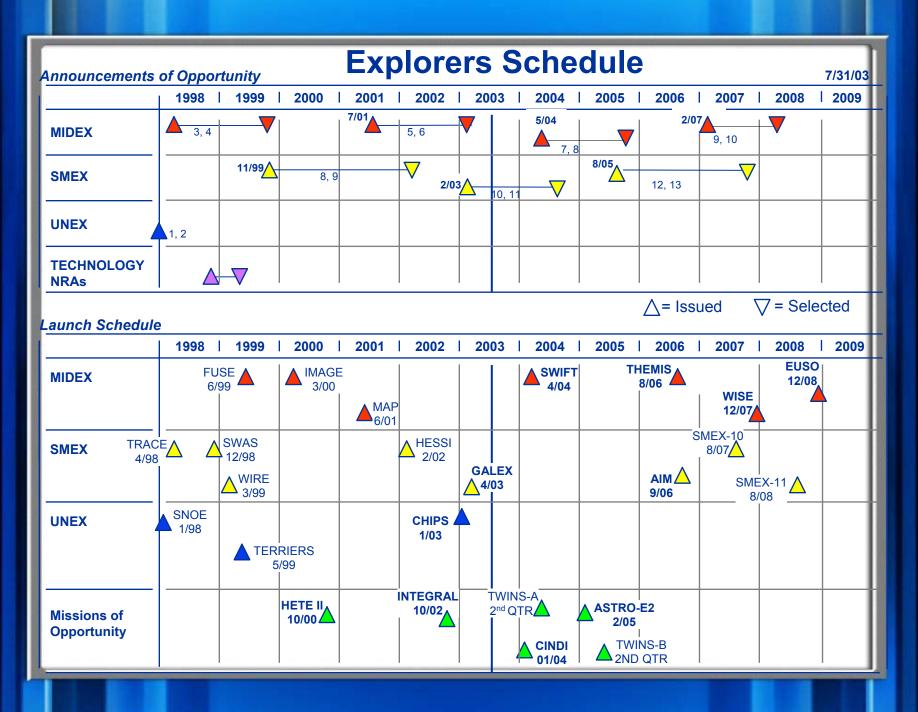
# **Explorers Retreat**

**September 30, 2003** 

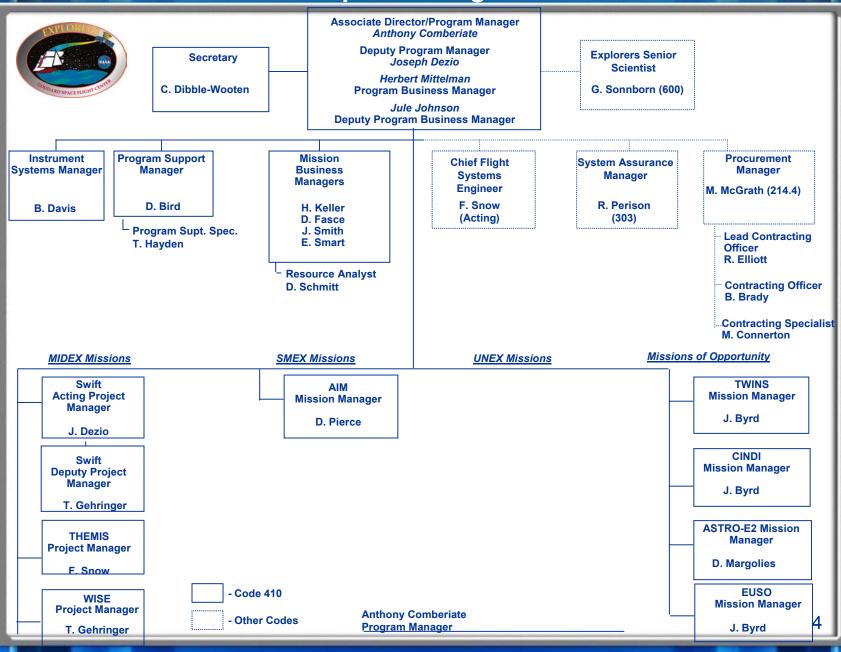


Tony Comberiate Explorers Program Manager





#### **Explorer Program**





#### GSFC Explorers Program Office Responsibilities

- Supporting HQ during the AO process as requested while ensuring a "communication firewall" with any GSFC proposers responding to the AO.
- Ensuring the PI takes the appropriate actions to achieve success within committed cost, schedule and NASA requirements and constraints.
- Conducting ongoing assessments of the programmatic progress of the mission including management, cost, and risk.
- Conducting technical and resource management of all contracts, grants and task orders.
- Coordinating the provision of all government-furnished services and hardware, such as co-Investigator services, instruments, spacecraft, space communication support, launch services, etc.
- Calling for a status review if there is evidence that the mission could violate pre-determined cost and/or schedule constraints or not meet Level 1 requirements; this review would be a precursor to a potential formal Termination Review.



#### **GSFC Explorers Program Office** Responsibilities (Cont.)

- Selecting a Contracting Officer's Technical Representative for any GSFC contracts (this would typically be the role of the Mission Manager.
- Appointing a Mission Manager who will:
  - Provide specific management functions (e.g., launch vehicle interface) as required.
  - Recommend alternative courses of action when technical, cost, or schedule difficulties arise.
  - Assure that adequate government resources are applied to the mission as required.
  - Lead the GSFC engineering team in providing Program Office technical oversight/insight throughout the mission life cycle including mission operations.
  - Organize and provide for system and subsystem engineering expertise for each mission utilizing the services from the Applied Engineering & Technology Directorate and the Systems Technology and Advanced Concepts Directorate (providing the program office with mission technical insight, engineering support, analysis, test support, peer and system review support, etc.)
  - Organize and provide for mission assurance and safety support from the Office of Systems Safety and Mission Assurance.



## **GSFC Explorers Program Office**Responsibilities (Cont.)

- Developing a System Review Plan for the approval of the Systems Management
  Office (SMO) that addresses the organization and conduct of System Level Reviews
  (e.g., System Requirements Review, Preliminary Design Review, Critical Design
  Review, Pre-Environmental Review, Operations Readiness Review, Pre-Ship Review,
  Red Team Review, Launch Readiness Review, etc.)
- Providing recommendations to the SMO for the selection of an independent, external co-chair for the standing review panel for System Level Reviews, per GPG 8700.4 "Technical Review Program."
- Presenting an independent assessment of technical status, Estimate to Complete, schedule, descope plans, and reserves at the Mission Confirmation Readiness Review.
- Coordinating system and discipline engineering support to the PI as provided for the in governing agreement, whether requested by the PI or deemed necessary by the Program Manager.
- Using its resource and business staff to maintain insight and provide recommendations through contract and budget analyses and personal contacts.



#### GSFC Explorers Program Office Responsibilities (Cont.)

- Providing insight to NASA management through monthly reviews, weekly reporting, timely notification of problems/resolution plans, and involvement in special reviews.
- Generating with the PI and PI Team a Mission Level Requirements
   Document that is approved by the Enterprise at Mission
   Confirmation.
- Ensuring that the Project complies with all applicable government and NASA-specific policies and regulations.
- Coordinating the transfer of NASA Mission Operations responsibility to the appropriate Project Office following completion of on-orbit checkout.



#### Principal Investigator Responsibilities

- Ensuring overall mission scientific and programmatic success as defined in the governing instrument.
- Assembling and leading the science, management and technical team to formulate, implement and operate the mission.
- Establishing an experienced team with the proper project management and infrastructure in place to manage and implement the mission. (The PI may delegate project management and implementation to an institution other than his own.).
- Generating and adhering to a Project Plan that meets the requirements of NPG 7120.5. (Contained in Confirmation Assessment Review Package)
- Conducting Peer Reviews and providing the results to the System Level Reviews:
  - The PI is required to staff the Peer Reviews with independent, experienced, experts from outside the PI Team as well as team members.
  - Goddard technical experts assigned through the Program Office will participate in these reviews.
  - The Program Office is to be invited to all reviews.



## Principal Investigator Responsibilities (Cont.)

- Staying actively involved with all aspects of mission implementation, decision making, and reporting.
- Reporting technical and programmatic (schedule slack, cost and cost reserve, manpower) progress and status.
- Demonstrating readiness to transition from Formulation to Implementation at the Confirmation Readiness Review
- Developing and implementing an education and outreach activity consistent with the proposal and the Enterprise education and outreach strategy.
- Certifying that the mission is ready for launch at the Mission Readiness Review.
- Notifying the GSFC Mission Manager or Mission Director in the event of a significant on-orbit anomaly.